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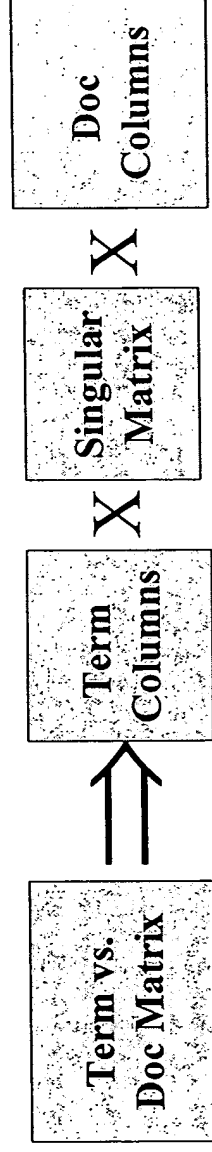
This is an illustration of a large result set encountered in typical Internet searches.

WEB PAGES ◆ About 131,638 pages found

FIGURE 1. Example of the Large Result Sets of Internet Searches

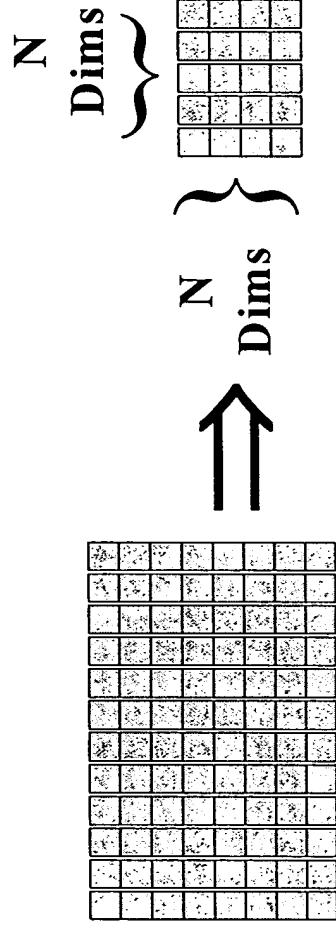
	Doc #1	Doc #2	...	Doc #n
able	1	0	...	1
acid	0	2	...	0
...
<term m>	1	0	...	1

FIGURE 2 Term by Document Matrix



**SVD Extracts Key
Relationships among Terms -
Basis for Conceptual Matching**

FIGURE 3 – Singular Value Decomposition (SVD) Operation



Large, Sparse Matrix **LSI Vector Space**
Typically, N= Several Hundred

FIGURE 4 – Dimensionality Reduction

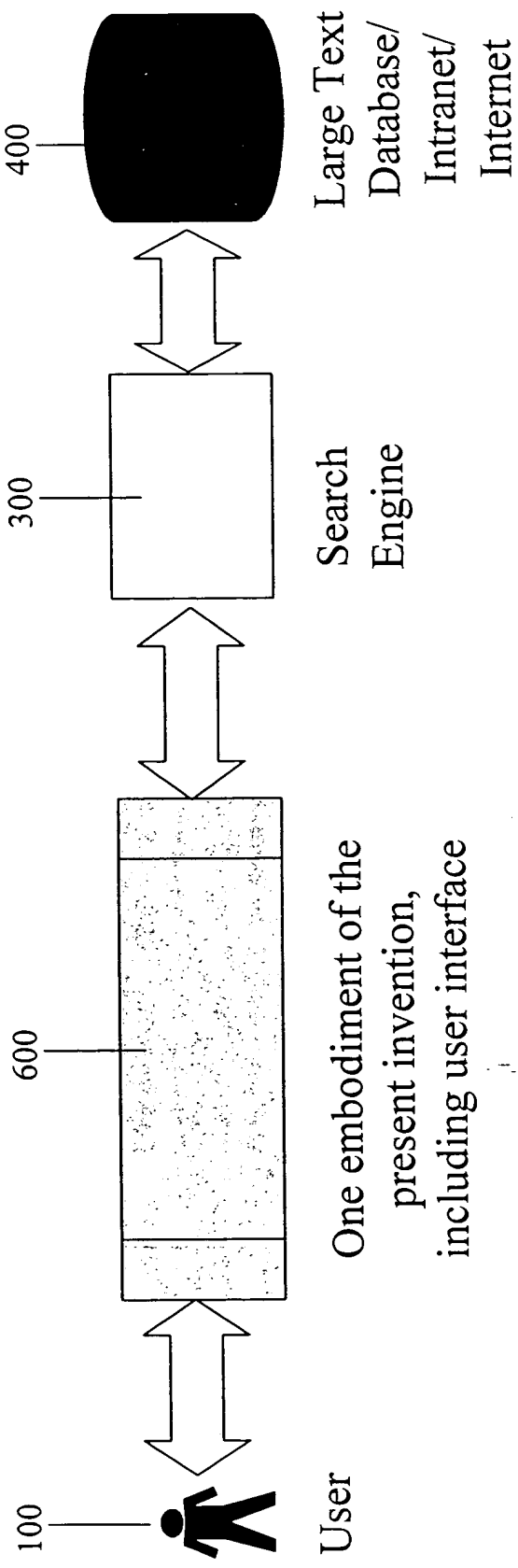


FIGURE 5. Intermediary Role of the Present Invention

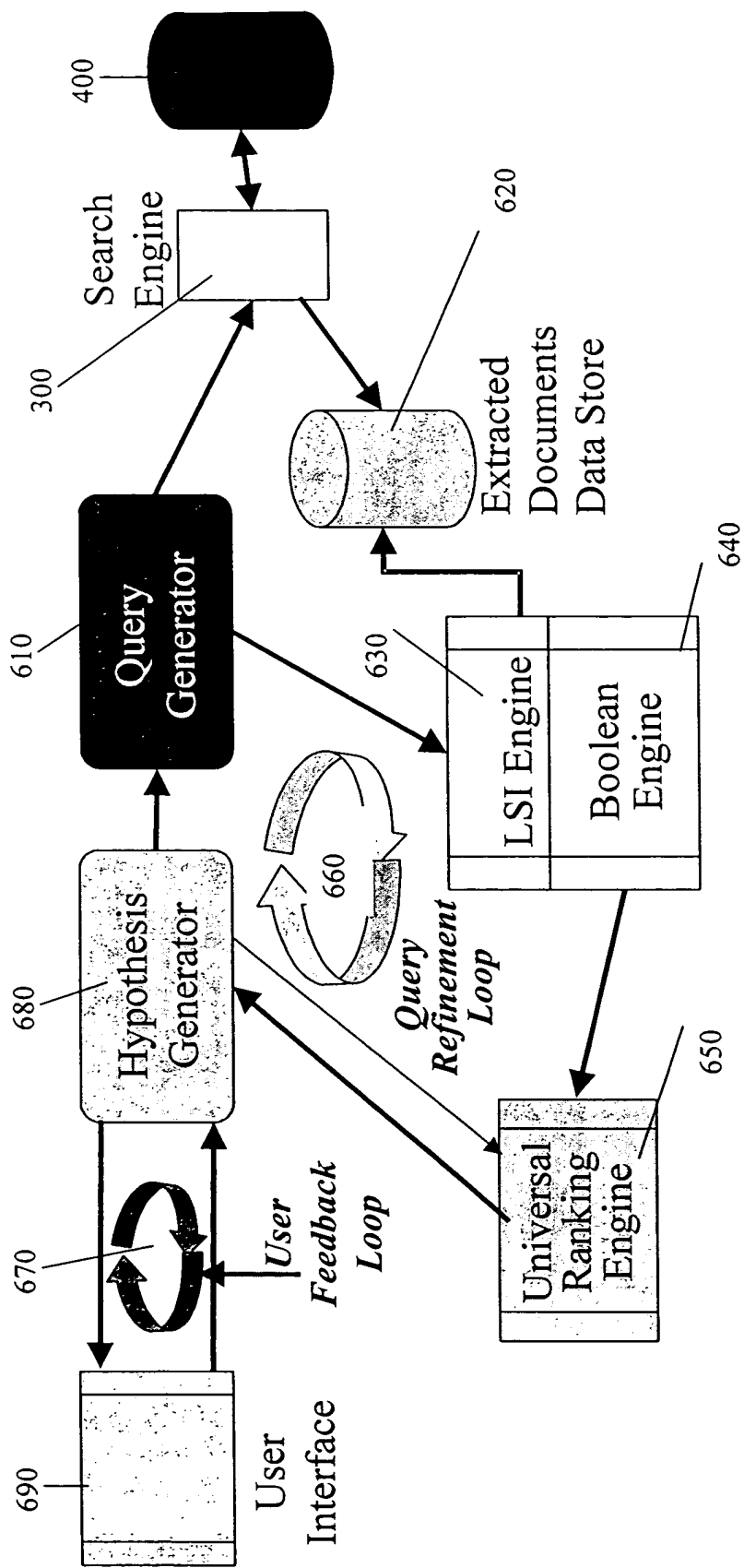


FIGURE 6. Feedback Loops of the Present Invention

<div>692</div> <div>691</div> <div>Objects of Interest:</div> <div>693</div> <div>bear</div>	<div>694</div>
<div>Related Objects:</div> <div>tooth</div> <div>claw</div>	<div>Unrelated:</div> <div>teddy bear</div> <div>investor</div>
<div>Synonyms:</div> <div>ursinus</div> <div>696</div>	<div>Important if Related:</div> <div>killer</div> <div>savage</div> <div>695</div>

FIGURE 7. Simple User Interface

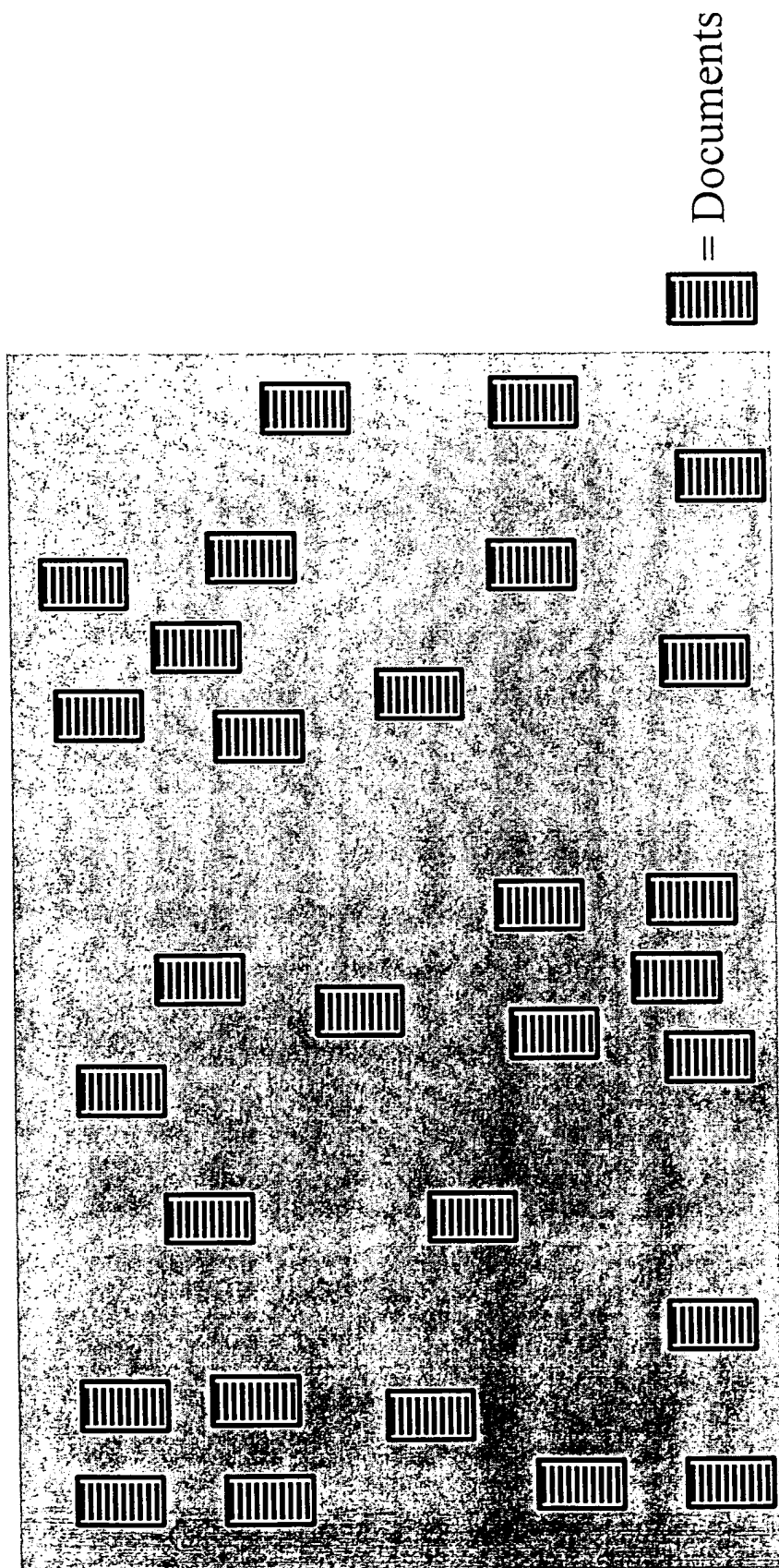


FIGURE 8. Two-Dimensional Representation of an LSI Space

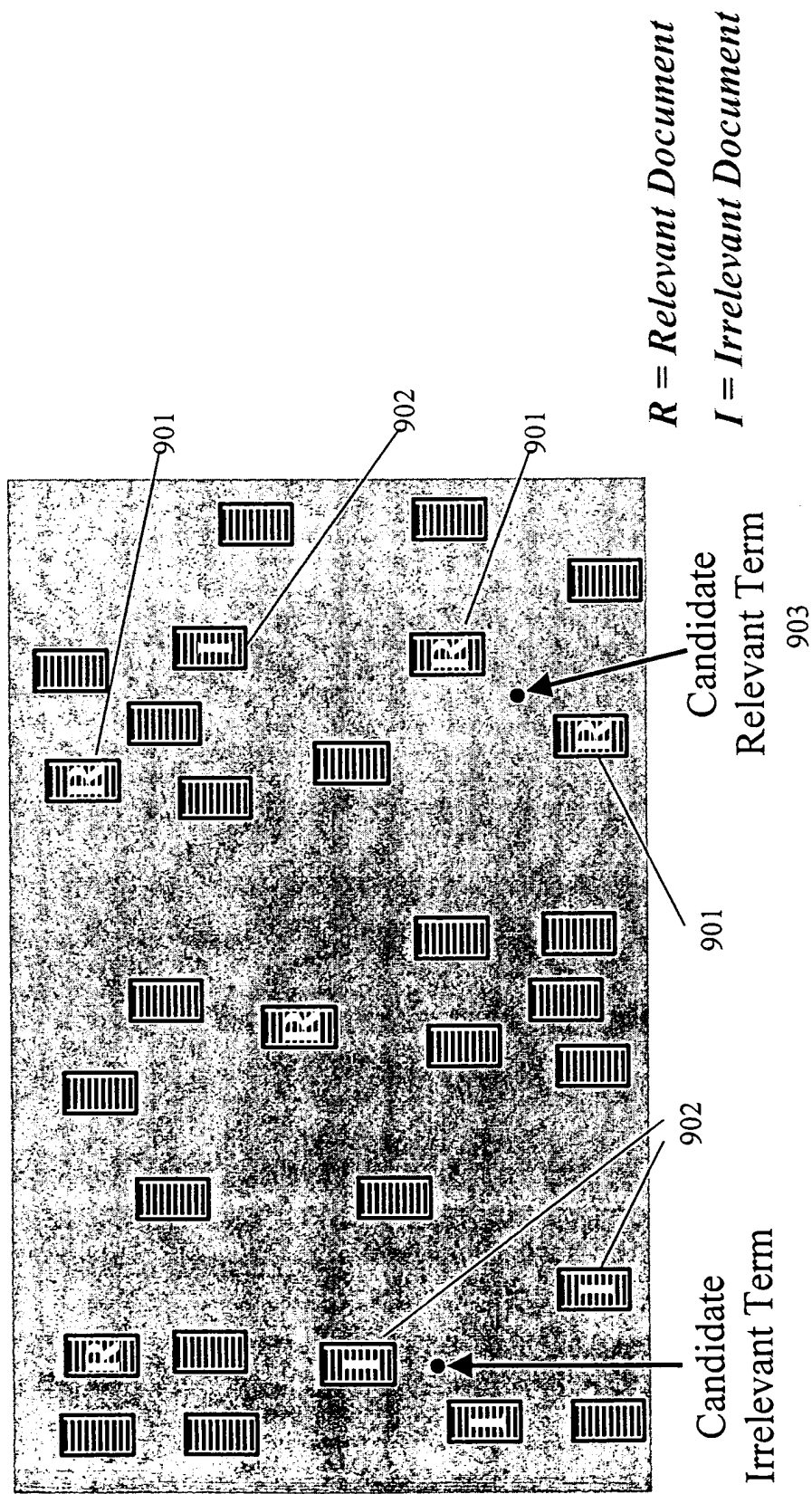


FIGURE 9. Proximity of Relevant Terms to Relevant Documents and Irrelevant Terms to Irrelevant Documents

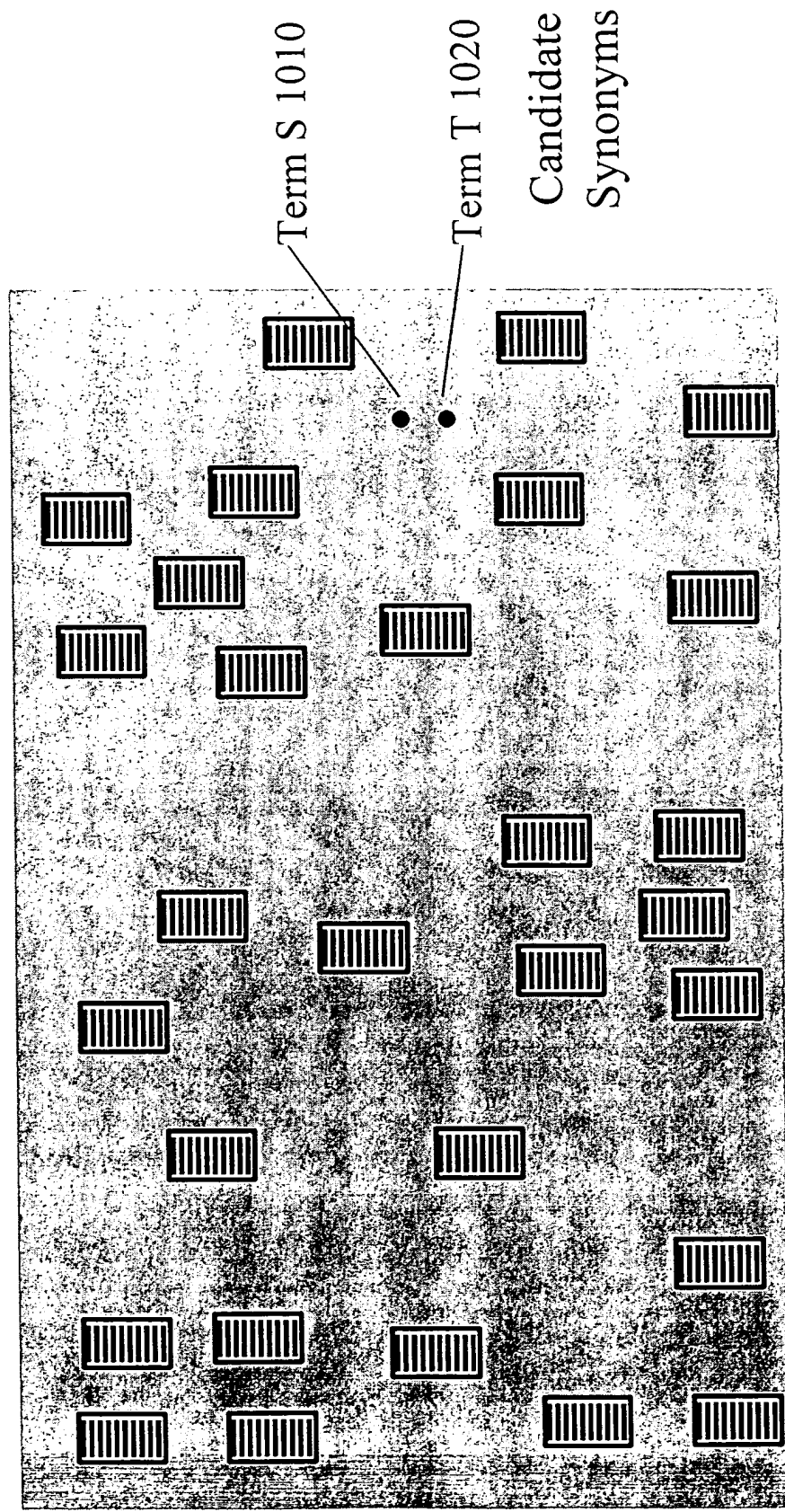


FIGURE 10. Candidate Synonym Terms

Are Koala bears objects of interest?	Yes <input type="radio"/>	No <input type="radio"/>	Don't Know <input type="radio"/>
Is ant bear a relevant object?	Yes <input type="radio"/>	No <input type="radio"/>	Don't Know <input type="radio"/>
Is cub scout an irrelevant term?	Yes <input type="radio"/>	No <input type="radio"/>	Don't Know <input type="radio"/>
Is Ursinus a synonym for bear?	Yes <input type="radio"/>	No <input type="radio"/>	Don't Know <input type="radio"/>
<div>Submit</div>			

FIGURE 11. User Interface for Specific Feedback